DOCUMENT RESUME

ED 356 063 PS 021 277

AUTHOR Abbott-Shim, Martha; And Others
TITLE Development and Validation of the Assessment Profile: Research Version.
PUB DATE 27 Mar 93
NOTE 8p.; Poster presented at the Biennial Meeting of the Society for Research in Child Development (New Orleans, LA, March 25-27, 1993).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Check Lists; *Concurrent Validity; *Content Validity; Curriculum Evaluation; *Evaluation Methods; Item Response Theory; Preschool Children; *Preschool Education; Teacher Student Relationship; Teaching Methods; Test Content
IDENTIFIERS *Assessment Profile Research Version; Developmentally Appropriate Programs; *Learning Environment

ABSTRACT

This paper reports on the development and validation of the Assessment Profile: Research Version, an observation checklist containing 87 items that reflect developmentally appropriate practices in early childhood programs. The Assessment Profile provides quantitative measures of classroom environments and teaching practices which facilitate the development of young children. The profile consists of five scales: (1) Learning Environments; (2) Scheduling; (3) Curriculum; (4) Interacting; and (5) Individualizing. The Assessment Profile was formed by selecting those items with the highest discriminating ability from the Assessment Profile for Early Childhood Programs. Content validity was established by expert review and by cross-referencing the content of the Assessment Profile with the accreditation criteria of the National Association for the Education of Young Children. The concurrent validity of the Assessment Profile with the Early Childhood Environment Rating Scale (ECERS) was examined in two studies that used samples of children in 53 and 120 preschool classrooms. Results indicated a correlation between the scales of the Assessment Profile and the scales of the ECERS and the ECERS total score. (MM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED356063

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Development and Validation of the Assessment Profile: Research Version

Martha Abbott-Shim
Georgia State University
*
John H. Neel
Georgia State University
*
Annette Sibley
Quality Assist, Inc.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Annette Sibley
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Poster Session
Society for Research in Child Development

March 27, 1993
New Orleans

PS 021277

BEST COPY AVAILABLE

The *Assessment Profile: Research Version* presents global measures of quality encompassing both structural and process features of child care settings. The Ass*essment Profile: Research Version* consists of five scales: Learning Environment, Scheduling, Curriculum, Interacting, and Individualizing. The Assessment Profile: Research Version is an observation checklist containing a total of 87 items that reflect developmentally appropriate practices in early childhood programs. Items represent observable procedures, behaviors, and records that exemplify classroom practices. Items are stated in an objective and concrete manner to ensure inter-observer agreement. Observers have been successfully trained to use the *Assessment Profile: Research Version.* Interobserver agreement has ranged from 90% to 95%.

This paper reports on the development and validation of the *Assessment Profile: Research Version.* The *Assessment Profile* provides quantitative measures of classrooms and teaching practices which facilitate the learning and development of young children. The Assessment Profile: Research Version was developed to assess child care quality as defined by the early childhood profession.

Perspectives

Child care quality has been defined in terms of structural and process variables. Structural variables include adult:child ratios, group size, and caregiver training/education. Process variables encompass the dynamic interactions between the teacher, child, and the learning environment.

The structural features of adult:child ratio, group size, and caregiver training/education were first identified in the National Day Care Study (Roupp et al, 1979). These three variables have been found to be predictive of gains in children's development (see Phillips and Howes, 1987) and have since been referred to as the "iron triangle" (Phillips, 1988). Recent studies have reported staff turnover to be an important structural variable as well (Whitebook, Howes, & Phillips, 1990).

The research on process variables has focused on specific types of interactions between the teacher, child, and learning environment. Research on process variables has been limited and examination of isolated interactive variables has not provided a "comprehensive picture of the complex relationships among day care quality and children's development." (Dunn, 1991)

Methods

Reliability and Item Selection by Item Response Theory

The *Assessment Profile: Research Version* was formed by selecting those items with highest discriminating ability from the *Assessment Profile for Early Childhood Programs.* This was done to produce a shorter instrument while retaining as much reliability as possible.

In modern item response theory the error in a score depends on the particular items used in the test and on the particular ability level. The error in a score thus differs for different abilities. It is theoretically possible to design a test with a desired accuracy, i.e. with adequately small error for any individual's score. In practice, time constraints and lack of availability of items with necessary characteristics for a given measure may prohibit a desired level of accuracy being reached. On many measures, higher errors are obtained for extreme scores and lowest error is found for an average ability level. It is customary to report the relationship between ability and these errors in the form of a test information function. (Hambleton, Swaminathan, & Rogers, 1991, Pp. 94, 99-106) The test information function is the reciprocal of the error variance of the test scores. When test information is high, the scores are known with greater accuracy than when the test information is low. Figures 1-5 present the test information curves for the five scales.

Test Information for Learning Environment

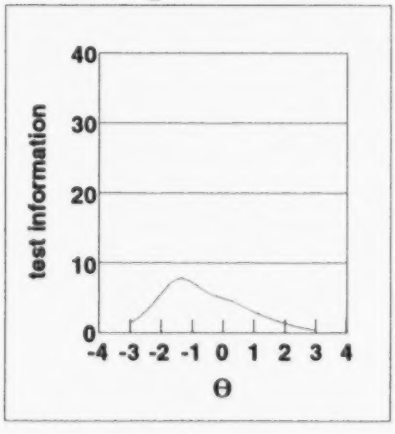

Figure 1

Test Information for Scheduling

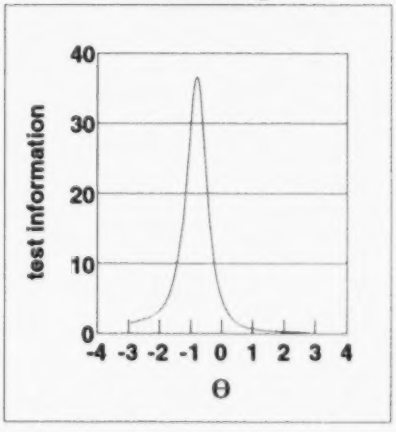

Figure 2

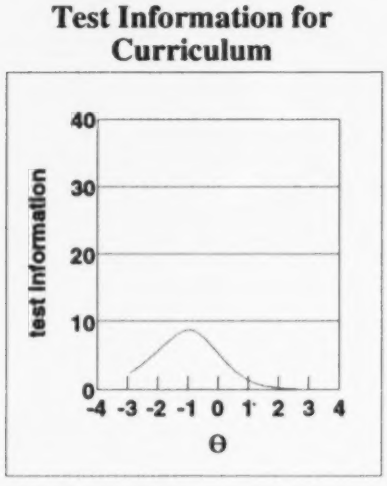

Figure 3

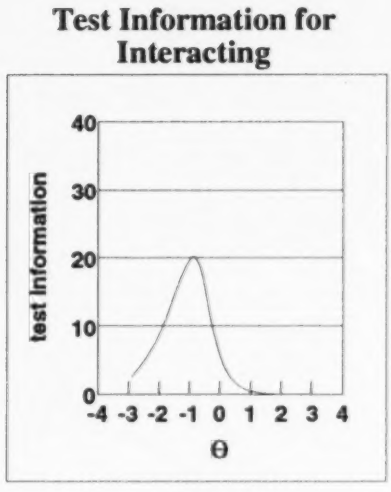

Figure 4

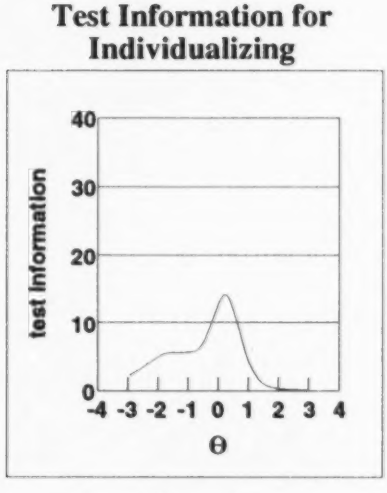

Figure 5

Data Sources

Both content validity and criterion-related validity were sought. Content validity was established by expert review. In preparation for developing the Assessment Profile: Research Version, the authors carried out a comprehensive review of the early childhood/child development literature. Over the course of its development, the *Assessment Profile* was reviewed by a wide range of early childhood professionals. These professionals represented early childhood trainers, program administrators, teachers, resource and referral staff, and professors of early childhood education.

To further establish content validity, the *Assessment Profile* was also cross referenced with the Accreditation Criteria of the National Association for the Education of Young Children. These Accreditation Criteria provide the nationally recognized professional standards of high quality, developmentally appropriate practices for early childhood programs. The cross reference of the content of the *Assessment Profile* and the Accreditation Criteria showed extensive consistency between the two measures with 100% match.

Criterion related validity was sought as concurrent validity with the *Early Childhood Environment Rating Scale,* ECERS, (Harms & Clifford, 1980). A sample of 53 preschool classrooms in 44 child care centers in Georgia, Virginia, and Massachusett was used to estimate the concurrent validity of the Assessment Profile with the ECERS. A second study of the 120 preschool classrooms in 40 child care centers was conducted to examine the concurrent validity of the *Assessment Profile* scores with the ECERS total score.

Results

Table 1 lists the correlations between the subscales of the Assessment Profile and ECERS.

TABLE 1
Intercorrelations of the *Assessment Profile* and the Subscales of the Early Childhood Environment Rating Scale for Preschool Classrooms

	Early Childhood Environment Rating Scale						
	Personal Routines	Furnish. /Displays	Language Exper.	Fine/ Gross	Creative Activities	Social Develop.	Adult Needs
Profile Scales							
Learning Envir.	.45*	.61**	.55**	.51**	.64**	.58**	.65**
Scheduling	.28	.34	.38	.38	.50**	.37	.45*
Curriculum	.42*	.61**	.53**	.49**	.66**	.57**	.63**
Interacting	.10	.31	.21	.20	.41*	.31	.46*
Individualizing	.46*	.48*	.58**	.56**	.55**	.52**	.65**

*p<.001, **p<.000

Table 2 presents the correlations from a second study which compared scores on the *Assessment Profile* and the total ECERS.

TABLE 2
Correlations Between the Total ECERS
Scores and the *Assessment Profile* Subscales

	ECERS Preschool
Profile Scales	
Learning Environment	.7168**
Scheduling	.6910**
Curriculum	.8764**
Interacting	.8669**
Individualizing	.7106**

**p<.000

The *Assessment Profile* is a checklist using very low inference items while the ECERS uses much higher inference items. Moreover, the two instruments look at somewhat different aspects of the classrooms as is evident by the names of their subscales. These correlations are within what might be expected given the different nature of the two instruments. That is, moderate but not strong correlations should exist between the subscales of the two instruments.

Conclusions

The Assessment Profile: Research Version was created to assess child care quality as defined by the early childhood profession. The instrument has content validity as judged by experts in the field. The *Assessment Profile: Research Version* is a shorter instrument while maintaining validity. Although examining different aspect so the classroom environment, it has reasonable concurrent validity with the ECERS. Correlations between the scales of the two instruments and between the *Assessment Profile scales and the ECERS total score indic*ate appropriate concurrent validity. The five scales of the Assessment Profile: Research Version provide useful global measures of child care quality and developmentally appropriate practices as defined by the early childhood profession.

References

Abbott-Shim, M. (1991). Quality care: A global assessment. Unpublished Manuscript, Georgia State University.

Dunn, L. (1991). Structural, global, and specific features of day care quality and children's development. Paper presented at the Society for Research in Child Development, Seattle, WA.

Hambleton, R.K., Swaminathan, A., & Rogers, H.J. (1991). Fundamentals of item response theory. Newbury Park, CA: Sage Publications, Inc.

Harms, T. & Clifford, R. (1980). The Early Childhood Environment Rating Scale. New York, NY: Teacher's College Press.

Roupp, R., Travers, J., Glantz, F., & Goelen, C. (1979). Children at the center: Final results of the National Day Care Study. Cambridge, MA: Abt Associates.

Phillips, D. & Howes, C. (1987). Indicators of quality in child care: Review of research. In D. Phillips (Ed.), Quality in child care: What does the research tell us? (Pp. 43-56). National Association for the Education of Young Children: Washington, D.C.

Phillips, D. (1988). Quality in child care: Definitions and dilemmas. Paper presented at the Mailman Family Foundation Symposium, White Plains, NY.

Whitebook, M., Howes, C., & Phillips, D. (1990). Who cares? Child care teachers and the quality of care in America. Final report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.